

**METHOD OF ULTRA-LOW ENERGY ION IMPLANTATION TO
FORM ALLOY LAYERS IN COPPER**

ABSTRACT OF THE DISCLOSURE

A method of fabricating an integrated circuit can include forming a barrier layer along lateral side walls and a bottom of a via aperture, forming a seed layer proximate and conformal to the barrier layer, and ion implanting elements into the seed layer. The via aperture is configured to receive a via material that electrically connects a first conductive layer and a second conductive layer.